

From: [Garyg Miller](#)
To: [Dipanjana Bhattacharya](#); lvoskov@tceq.state.tx.us
Cc: [Gustavo Chavarria](#)
Subject: Fw: iron RfD
Date: 01/19/2007 03:17 PM
Attachments: [iron RfD from NCEA 2006.pdf](#)

Folks,

Please take a look at the proposed change in the iron screening level below and let me know if you have any comments on it.

Thanks,

Gary Miller
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----- Forwarded by Garyg Miller/R6/USEPA/US on 01/19/2007 02:43 PM -----

Kirby Tyndall
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To: Garyg Miller/R6/USEPA/US@EPA
cc: Eric Pastor <eric.pastor@pbwllc.com>
Subject: iron RfD

01/19/2007 01:45 PM

Hi Gary,

I believe you and Eric discussed the changed toxicity value for iron. This email provides additional information related to the NCEA document describing the new RfD, as well as the new RBV for iron.

The National Center for Environmental Assessment (NCEA) often provides toxicity values for Superfund projects when values are not available on the Environmental Protection Agency's (EPA) on-line database, Integrated Risk Information System (IRIS). NCEA generally does a review of their toxicity values every three years and, as such, has revised the reference dose (RfD) for iron in September of 2006.

The risk-based value (RBV) in the Remedial Investigation/Feasibility Study (RI/FS) Work Plan for the Gulfco Marine Maintenance Site is 23,000 mg/kg. This value is EPA's Region 6 Human Health Medium-Specific Screening Level for iron, which is calculated using the previous NCEA RfD 0.3 mg/kg-day. The new RfD is 0.7 mg/kg-day and is based on more recent information, which is protective against deficiency as well as toxicity since iron is an essential element. NCEA's document is provided as an attachment.

Using EPA's calculations described in the Region 6 Human Health Medium-Specific Screening Levels support document and the new iron RfD of 0.7 mg/kg-day to calculate the RBV, the RBV is 53,000 mg/kg. We propose to use this value as the site RBV for soil instead of the value listed in the RI/FS Work Plan. This is consistent with the Work Plan since it allows for the use of updated toxicity information.

Please let me know if you have any questions or comments.

Regards,
Kirby Tyndall Ph.D., DABT
Senior Toxicologist
Pastor, Behling and Wheeler, LLC



512 671-3434 iron RfD from NCEA 2006.pdf